

AMENDMENTS TO THE CLAIMS

Applicant submits below a complete listing of the current claims, including marked-up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing. This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Currently amended) A system for using a user-mode module to kernel-mode driver interface to send commands to and receive information from a kernel-mode wireless wide area network (WWAN) device driver, the system comprising computer-executable modules encoded on a computer-storage medium, the modules comprising:

a user-mode entity ~~configured to send~~ for sending an object identifier (OID) from a first set of object identifiers (OIDs), through a user-mode module to kernel-mode driver interface, to the WWAN device driver and ~~configured to receive~~ for receiving an OID from a second set of OIDs, through the user-mode module to kernel-mode driver interface, from the WWAN device driver;

wherein, after sending the OID from the first set, the user-mode entity is permitted to send further OIDs from the first set to the WWAN device driver through the user-mode module to kernel-mode driver interface, prior to receiving a response from the WWAN device driver,

wherein the second set of OIDs comprises OIDs for indicating to the user-mode entity that a WWAN device associated with the WWAN device driver has been provisioned by a WWAN service provider.

2. (Original) The system of claim 1 wherein the WWAN device driver controls a GSM-based device.

3. (Original) The system of claim 1 wherein the WWAN device driver controls a CDMA-based device.

4. (Original) The system of claim 1 wherein the WWAN device driver controls a CDMA or GSM-based device.

5. (Canceled)

6. (Original) The system of claim 1 wherein the first and second sets of OIDs comprise OIDs for authentication with information from a SIM.

7. (Original) The system of claim 1 wherein the first and second sets of OIDs comprise OIDs for authentication with a PIN.

8. (Original) The system of claim 7 wherein the PIN is used in conjunction with a voice call.

9. (Withdrawn) The system of claim 1 wherein the first and second sets of OIDs comprise OIDs for managing a signal strength range threshold.

10. (Withdrawn) The system of claim 9 wherein the first set of OIDs comprises OIDs sendable by the user-mode entity to establish a signal strength range threshold, and wherein the second set of OIDs comprises OIDs receivable from the WWAN device driver for indicating the signal strength is outside the established signal strength range threshold.

11. (Withdrawn) The system of claim 1 wherein the first and second sets of OIDs comprise OIDs for managing a signal strength reporting interval.

12. (Withdrawn) The system of claim 11 wherein the first set of OIDs comprises OIDs sendable by the user-mode entity to establish a signal strength reporting interval, and wherein the second set of OIDs comprises OIDs receivable from the WWAN device driver with the minimum frequency of the established signal strength reporting interval.

13. (Canceled)

14. (Withdrawn) The method of claim 29 further comprising sending an OID to adjust a signal strength range threshold.
15. (Withdrawn) The method of claim 29 further comprising determining, by the WWAN device driver in connection with a WWAN device, that a signal strength of the WWAN device is outside an established signal strength range threshold.
16. (Canceled)
17. (Withdrawn) The method of claim 29 wherein the WWAN device driver controls a GSM-based device.
18. (Withdrawn) The method of claim 29 wherein the WWAN device driver controls a CDMA-based device.
19. (Canceled)
20. (Withdrawn) The method of claim 29 further comprising receiving an OID from the device driver indicating whether or not a PIN is required.
21. (Withdrawn) The method of claim 20 wherein the user-mode entity sends an OID containing a PIN if a PIN is required.
22. (Withdrawn) The method of claim 29 further comprising receiving an OID indicating that the WWAN device driver is searching for a provider.
23. (Withdrawn) The method of claim 22 further comprising receiving an OID indicating that the WWAN device driver has packet attached.
24. (Withdrawn) The method of claim 29 further comprising sending an OID requesting a list of provisioned contexts.

25. (Withdrawn) The method of claim 24 further comprising receiving an OID with a list of provisioned contexts.

26-27. (Canceled)

28. (Currently amended) A computer-storage medium comprising computer-executable modules, the modules comprising:

a kernel-mode wireless wide area network (WWAN) device driver;

a user-mode / kernel-mode interface;

a user-mode module; and

a user-mode entity ~~configured to send a plurality of~~ for identifying first and second object identifiers (OIDs) from a first set of OIDs to be sent by way of the user-mode module to the kernel-mode WWAN device driver through the user-mode / kernel-mode interface, and when the second OID is identified before receiving a return operation from the kernel-mode WWAN device driver, waiting to send the second OID at least until the return operation is received, the return operation indicating the kernel-mode WWAN device driver has received the first OID,

~~wherein, the kernel-mode WWAN device driver is configured perform~~ performs an operation requested by ~~[[a]] the first received OID from the plurality of OIDs, and, when [[a]] the second received OID from the plurality of OIDs is received before completion of the operation, store~~ the kernel-mode WWAN device driver stores an identifier of the second ~~received~~ OID in an information base.

29. (Currently amended) A method of operating a computing machine comprising a processor, the method comprising:

executing instructions on the processor for sending from a user-mode entity a first object identifier (OID) from a first set of OIDs to a kernel-mode wireless wide area network (WWAN) device driver through a user-mode / kernel-mode interface;

identifying, at the user-mode entity, a second OID from the first set of OIDs to be sent;

waiting to send ~~[[a]]~~ the second OID from the first set of OIDs until a return operation is received from the WWAN device driver;

sending the second OID by way of the user-mode entity to the WWAN device driver through the user-mode / kernel-mode interface before receiving a third OID from a second set of OIDs from the WWAN device driver;

after sending the second OID, sending a fourth OID by way of the user-mode entity to the WWAN device driver through the user-mode / kernel-mode interface before receiving the third OID from the second set of OIDs from the WWAN device driver;

queuing the second and fourth OIDs at the WWAN device driver; and
receiving the third OID.